



A subsidiary of Pinnacle West Capital Corporation



0000103672

ORIGINAL

Daniel Froetscher
Vice President
Energy Delivery

RECEIVED

Tel: 602-250-3331
Fax: 602-250-3701
daniel.froetscher@aps.com

Mail Station 9086
PO Box 53999
Phoenix, Arizona 85072-3999

2009 OCT -6 P 12: 00

October 6, 2009

ARIZONA CORPORATION COMMISSION
DOCKET CONTROL

Arizona Corporation Commission
DOCUMENTED

OCT -01 2009

Ms. Kristin K. Mayes, Chairman
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

DOCUMENTED BY

**Re: Follow-Up to Questions Regarding Load Pockets and Customer Line Extension Issues
Raised During the APS Rate Case Settlement Testimony E-01345A-08-0172**

Dear Chairman Mayes:

The following summary provides the follow-up information that APS agreed to provide related to several of the issues discussed in conjunction with my testimony during the recent APS Rate Case Settlement hearings.

Load Pockets:

As you will recall, there was testimony during the hearings that the 1,000 foot free line extension policy formerly employed by APS for its residential customers resulted in some "hidden" or less visible costs that ultimately are borne by all customers across the APS system. Such costs develop when growth occurs incrementally within the system, principally in areas where planned developments do not occur and instead growth is of a piecemeal or wildcat nature, and is fostered, at least in part, by the referenced line extension policy. These areas have been referenced as "mini load pockets."

APS made mention of the fact that such incremental growth over time creates operating issues on the APS system, which ultimately must be addressed and result in added costs to all APS customers. You asked if APS had ever done an analysis designed to capture the increased O&M costs associated with serving such areas.

APS has not conducted such an analysis in the past, and in exploring the issue over the past several weeks, found that we are not able to isolate O&M costs to this granular a level. These load pockets are part of the larger system APS services in its various geographic areas, and APS does not have the ability to segment out the specific O&M costs associated with serving the load pockets only. Nonetheless, the Company believes upon review of the areas within which APS has experienced load pocket growth (provided below), you will conclude, as we have, that as such areas grow incrementally, service issues such as service reliability, voltage and voltage support, line capacity, line loading and phase balancing emerge. Such issues result in increased costs associated with trouble-shooting service issues, identifying and implementing either temporary or permanent remedies to the distribution system, and ultimately costly upgrades or infrastructure improvements necessary in order to provide the quality of service our customers deserve and APS prides itself in delivering.

Within the oral testimony, APS identified several geographic areas that can be described as load pockets, and you asked if I was familiar with any others. Attached is a brief summary of several load pocket areas:

Hereford/Palominas:

Located approximately 20 miles west of Bisbee, this area has seen steady growth over the past 10-15 years. It had been serviced by a long distribution feeder line, with the majority of growth occurring at the end of the line. Such growth has been principally residential in nature, with little, if any, of it occurring in a planned nature. This area has had a fair number of complaints to the ACC over the years regarding service quality issues, and was identified as an area that merited special scrutiny in ACC Staff's Quality of Service Assessment conducted as part of the Company's 2005 Rate Case application.¹

Over the past five years, APS has invested more than \$5 million in infrastructure to improve service quality, including but not limited to the following projects:

- Construction of a 69 kV line and new substation.
- Rebuild of at least 6 miles of 12 kV distribution lines.
- Conversion of several existing single phase primary lines to three phase lines as well as the upgrading of conductors.

New River:

Located north of the immediate Phoenix area, New River has also experienced steady, incremental growth with little of it planned. The Commission received a series of customer complaints in the 2002 timeframe, principally related to voltage and service quality issues. APS has invested more than \$2 million over the past five years related to:

- Installation of a series of regulator and capacitor banks.
- Rebuild of several miles of 12 kV distribution lines.
- Construction of 4.5 miles of double circuit 69 kV lines.

Gavilan Peak:

Also located north of the Phoenix area, and an area that experienced similar growth and service complaint issues at the ACC in the 2001 – 2002 timeframe. APS has invested almost \$5 million in:

- Installation of regulator and capacitor banks.
- Conversion of single phase primary lines to three phase and the upgrading of several distribution feeder lines.
- Construction of a new 69 kV to 12 kV distribution substation.

Little Rainbow Valley:

Located west of the Phoenix area and south/southeast of Buckeye, this area has experienced similar growth characteristics as described above. APS has, over the past five years, invested more than \$1.5 million in the:

- Installation of a number of reclosers, capacitor banks and regulator banks.
- Reconstruction of at least six miles of distribution feeder lines to improve voltage support and line capacity.

Congress:

Located between Wickenburg and Prescott along Highway 89A, this area has experienced voltage issues over the past several years, principally due to incremental residential load growth. Again, most has occurred outside of any municipal limits and has not been of a planned variety. APS has invested more than \$1.5 million over the past several years in the:

¹ Direct Testimony of Jerry D. Smith, August 18, 2006, (Docket No. E-01345A-05-0816); "Engineering further suggests that the Commission be particularly mindful of quality of service differences between APS Metro Division and more rural service oriented APS divisions. It is for this reason that quality of service to the APS Southeast Division merits special scrutiny to assure service does not deteriorate or become problematic."

- Installation of a new primary distribution feeder line to serve the area.
- Reconstruction of several miles of existing distribution feeder lines.
- Installation of several regulator and capacitor banks.

It should be noted that the costs identified above do not include the construction of a new 69/12 kV distribution substation and several additional distribution feeder lines that will be necessary to serve the area, and will be installed over the next several years, at an estimated cost in excess of \$3 million.

Coyote Springs:

Located north of the Prescott Valley area, this area is principally residential and has experienced similar piecemeal, incremental growth over the past six to seven years. APS has invested almost \$1.8 million over the past five years in upgrading service to this area; costs that do not include a pro-rata share of a new, temporary 69/12 kV distribution substation that now serves this area and a portion of north Prescott Valley. Other APS line improvements include:

- Installation of two miles of underground feeder line.
- Installation of several new distribution feeder lines out of existing and temporary substations.
- Conversion of several single phase primary lines to three phase primary lines and the upgrading of at least 5.5 miles of distribution feeder line.

In all of these cases, area growth has been primarily residential and has been "1,000 feet at a time," that is, reflective of the Version 8 line extension policy that included a free footage allowance. Because these areas have not been master planned, APS has installed facilities necessary to serve new customers as they connected, ensuring that adequate service and voltage has been available. As new customer after new customer connects, however, the upstream or backbone facilities serving a given area become taxed and overloaded, resulting in service quality issues. APS identifies these situations and spends a considerable amount of time and money engineering a longer-term solution, including but not limited to the installation of capacitor banks, voltage regulators, reconductoring of distribution feeder lines, installing additional phases and balancing load. In several cases, the ultimate solution has been to build a new 69 kV line and 69 / 12 kV substation to adequately serve an area.

Absent the 1,000 free footage extension policy, would such growth have occurred? While it is difficult to speculate, one may conclude that growth would have been more orderly; that is, rather than long extensions extending over many miles, a greater degree of infill may have occurred. The APS system would be better utilized and be more efficient; problems would likely surface sooner; and the remedy to such problems would be less extensive and costly. Two principal factors influence the mini load pocket issue: the 1,000 foot free extension policy and the absence of master planning / planned area developments in these areas. Each makes it extremely difficult for the utility to plan its facilities, and instead, facilities are constructed at a minimum cost to serve the customer today, without the long term approach that can accompany larger, planned projects within which future customer counts and loads can be sufficiently forecast and planned for.

Specific Customer Line Extension Issues:

As follow up to the questions raised regarding various customer comments the Commissioners received during recent Public Comment meetings, APS is providing the following updates.

Pam Pearsall, Yavapai County Assessor:

Ms. Pearsall spoke at the Prescott Public Comment meeting on August 3, 2009. During her comments Ms. Pearsall explained she had requested APS provide Yavapai County an updated version of "shape files" to assist them with assessing the value of property in their county.

As discussed during testimony, APS developed a license agreement by which confidentiality is assured and a meeting was held between Ms. Pearsall, Bert Sommer, Prescott Energy Delivery Manager and Dave Hopson, APS Mapping Section Leader on September 30, 2009. Following this meeting, APS is revising the license agreement to include an annual subscription for the county to use the data and will be providing the shape file once the signed agreement is received.

Jon Baker, Jon Baker Custom Homes:

Mr. Baker spoke at the Phoenix Public Comment meeting on August 12, 2009 stating that APS quoted him \$13,500 to run service 80 feet.

Mr. Baker owns several contiguous 1 acre lots in the Wittmann area and is presently building a house on one of these lots. Mr. Baker first contacted APS on May 29, 2009 to inquire about providing service to this new home and APS provided an initial, high level, verbal estimate of \$13,000.00.

After APS designed the job, an updated quote of \$12,376.41 was provided to Mr. Baker on June 26, 2009. This job requires APS to extend approximately 85 feet of primary wire from an existing overhead primary line across the street from the property. However, in addition to the 85 feet of primary wire, APS would then need to add a new 45 foot steel pole on the edge of Mr. Baker's property and extend underground primary cable 124 feet south from the new pole and then an additional 146 feet west to a new 50 kVa pad-mounted transformer located in the adjacent lot which Mr. Baker also owns.

APS has recommended, and designed the job, for Mr. Baker to "stub out" from the new 50 kVa transformer to two additional adjacent lots he owns. The cost for the two additional stub outs is about \$40.00. APS has recommended Mr. Baker add the stub outs now while he is excavating in the area. Mr. Baker has been advised the stub outs are not required by APS, but that if he plans to develop the adjacent lots, he may find that completing all the excavating at the same time will be more cost effective for him. To date, Mr. Baker has not signed a contract nor paid for the extension. He has advised APS that he plans on moving forward with this project once he has a contract for the home.

Terry Piske:

Mr. Terry Piske spoke at the Prescott Public Comment on August 3, 2006. He stated that he was given an estimate of \$30,000 and at a later date, that number increased to \$70,000.

As discussed during testimony, Mr. Piske's property is located more than 2,000 feet from the nearest source of power and therefore, he would not have qualified for a free footage extension under the Company's previous line extension policy (Schedule 3, Revision 8). Mr. Piske owns two contiguous 2-acre parcels in Walker, Arizona. His current plan is to put in a well and build a 1,900 square foot home with a 3 ton A/C on one of the parcels. Mr. Piske also plans to build a large workshop in the future.

Following the Prescott Public Comment meeting, APS personnel spoke with and then met with Mr. Piske at his property in Walker. During these discussions Mr. Piske told APS that he spoke about his property with an APS employee about 2 ½ years ago and was given a rough estimate of \$4,000 per pole. This price was a "back of the envelope" rough estimate that relied solely on verbal information Mr. Piske provided at the time and that entertained the idea that the service line could be extended overhead through Forest Service land. Mr. Piske also advised APS that he personally approached the Forest Service for permission to extend service down this route (Big Bug Mesa Road) and was told by the Forest Service that the time frame would be at least 1 year and that he would be required to provide archeological and biological studies. It was at that point that Mr. Piske decided he did not want to pursue a line extension using that route.

Most recently, when APS personnel met Mr. Piske at his lot in Walker, an alternate route was identified that would enable the line to be extended through private forest land. This alternate route is about the same distance as the original Big Bug Mesa Road route but presents topographical challenges and would require extensive tree trimming. The job as currently designed will require 10 poles, 9 down guys, 1 - 50kVa transformer and an underground service. The total distance for this project is 2,080 feet which will require about 4,000 feet of primary wire for 2 conductors. APS provided Mr. Piske a quote of \$63,316.38 on August 20, 2009. A separate quote of \$14,742.78 was provided for tree trimming in case Mr. Piske wanted to use APS crews to perform the tree work, however, Mr. Piske has advised APS that he made alternate arrangements for the tree trimming and will not require this service from APS. Mr. Piske remains in communication with APS personnel and is proceeding with the project as planned.

City of Douglas:

At the August 12, 2009 Phoenix Public Comment meeting and then again during his testimony on August 21, 2009, Barbara Wyllie-Pecora's witness, Mr. Carl Faulkner, discussed multiple line extension issues. Most of Mr. Faulkner's comments referred to his own development projects and were addressed during the hearing; however, Mr. Faulkner also provided an example of a building the City of Douglas purchased in order to put in a Call Center and stated the City was given a quote of \$70,000 which was later lowered to \$53,000. Shortly after Mr. Faulkner's testimony, a letter from the City of Douglas was filed in the rate case docket regarding the aforementioned Call Center and a new well site project the city had requested APS to provide service. Although you have not specifically asked APS to address this issue, we felt it would be helpful for the Commission to have additional details on the City of Douglas's projects.

Advanced Call Center Technologies (ACCT):

In their letter to the Commission, the City of Douglas stated they were approached by Advanced Call Center Technologies (ACCT) in May 2008 to set up operations in the area which would create approximately 600 new jobs. The City went on to explain that Douglas ACCT is located in an old grocery building that was vacant for over 20 years and that the City was required to pay \$69,532.58 to upgrade the APS infrastructure in order for APS to meet the service needs of the Douglas ACCT Call Center.

After looking into this matter, APS found the building in question has not been vacant for 20 years and the City's final cost for this project was significantly less than the amount quoted in the City's letter.

In order to meet the electrical needs of ACCT, APS prepared a design to install a new 2,000 amp SES on the outside of the building which replaced the existing 400 amp and 1,000 amp SES along with the 3 phase overhead service. At the time this request was processed the City of Douglas was required to pay APS a System Facilities Charge (SFC) of \$59,041.00 for the 2,000 amp SES. Credit of \$41,329.00 was given for the existing 400 amp and 1000 amp SES. Total SFC paid was \$17,712.00. In September 2008, after review of APS practices and in agreement with ACC Staff, APS began refunding all SFC previously collected. The City of Douglas was refunded \$17,712.00 for the SFC it paid APS bringing the final cost to the City for the Call Center project down to \$38,447.49.

**SUMMARY OF COST FOR SERVICE
UPGRADE TO DOUGLAS ACCT**

COST TO SERVE	\$ 38,447.49
SFC	+\$ 59,041.00
CREDIT FOR EXISTING SES	- \$ 41,329.00
INITIAL CUSTOMER CHARGE	= \$ 56,159.49
SFC REFUND	- \$ 17,712.00
FINAL CUSTOMER COST	= \$38,447.49

Ms. Kristin K. Mayes, Chairman

October 6, 2009

Page 6

City of Douglas Well Site

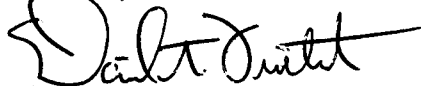
In its letter to the Commission, the City of Douglas stated it was mandated by ADEQ to secure new groundwater sources that met the current arsenic maximum contaminant levels.

APS was contacted in April 2009 by the City in regard to serving a new well site with a 250 HP pump. The City planned to install a new 600 amp service entrance section (SES) with an automatic transfer switch for a City-owned 600 amp standby generator.

APS's designed the job and provided a final design quote of \$30,597.92 for a job that requires APS to install a 45 foot steel pole with an overhead to underground transition; 1,320 feet of primary underground cable; a 500 kVa padmount transformer; underground service cable to 600 amp SES; set non-residential demand meter and current transformers (CT's). The City paid for this line extension in full on August 24, 2009; however, construction on the project has not yet begun.

In closing, I hope this information is responsive to questions or concerns that may have come about after APS's Rate Case Settlement hearings and the Rate Case's public comment meetings in Flagstaff, Prescott, Phoenix and Yuma. If you have any additional questions or concerns please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "David D. Smith", with a long horizontal flourish extending to the right.

DTF:ml

Copies of the foregoing emailed or mailed
This 6th day of October 2009 to:

Docket Control
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Kristin Mayes, Chairman
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Gary Pierce, Commissioner
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Paul Newman, Commissioner
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Sandra Kennedy, Commissioner
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Bob Stump, Commissioner
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Lyn Farmer, Administrative Law Judge
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Janice Alward
Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Steve Olea
Utilities Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Charles Hains
Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Ernest G. Johnson
Executive Director, Utilities Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007
ejohnson@cc.state.az.us

Maureen Scott
Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007
mscott@azcc.gov

Janet Wagner
Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007
jwagner@azcc.gov

Terri Ford
Utilities Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007
tford@azcc.gov

Barbara Keene
Utilities Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007
bKeene@cc.state.az.us

Daniel Pozefsky
Chief Counsel
RUCO
1110 West Washington, Suite 220
Phoenix, AZ 85007
dpozefsky@azruco.gov

William A. Rigbsby
RUCO
1110 West Washington, Suite 220
Phoenix, AZ 85007
brigsby@azruco.gov

Tina Gamble
RUCO
1110 West Washington, Suite 220
Phoenix, AZ 85007
tgamble@azruco.gov

C. Webb Crockett
Fennemore Craig
3003 North Central, Suite 2600
Phoenix, AZ 85012-2913
wcrocket@fclaw.com

Kevin Higgins
Energy Strategies, LLC
215 South State Street, Suite 200
Salt Lake City, UT 84111
khiggins@energystat.com

Michael L. Kurtz
Boehm, Kurt & Lowry
36 East Seventh Street, Suite 2110
Cincinnati, OH 45202
mkurtz@BKLLawfirm.com

Kurt J. Boehm
Boehm, Kurt & Lowry
36 East Seventh Street, Suite 2110
Cincinnati, OH 45202
kboehm@BKLLawfirm.com

The Kroger Company
Dennis George
Attn: Corporate Energy Manager (G09)
1014 Vine Street
Cincinnati, OH 45202
dgeorge@kroger.com

Stephen J. Baron
J. Kennedy & Associates
570 Colonial Park Drive
Suite 305
Roswell, GA 30075
sbaron@jkenn.com

Theodore Roberts
Sempra Energy Law Department
101 Ash Street, H Q 13D
San Diego, CA 92101-3017
TRoberts@sempra.com

Lawrence V. Robertson, Jr.
2247 E. Frontage Road
Tubac, AZ 85646
tubaclawyer@aol.com

Michael A. Curtis
501 East Thomas Road
Phoenix, AZ 85012
mcurtis401@aol.com

William P. Sullivan
501 East Thomas Road
Phoenix, AZ 85012
wsullivan@cgsuslaw.com

Larry K. Udall
501 East Thomas Road
Phoenix, AZ 85012
ludall@cgsuslaw.com

Michael Grant
Gallagher & Kennedy, P.A.
2575 East Camelback Road
Phoenix, AZ 85016
MMG@gknet.com

Gary Yaquinto
Arizona Investment Council
2100 North Central, Suite 210
Phoenix, AZ 85004
gyaquinto@arizonaic.org

David Berry
Western Resource Advocates
P.O. Box 1064
Scottsdale, AZ 85252-1064
azbluhill@aol.com

Tim Hogan
Arizona Center for Law in the Public
Interest
202 East McDowell Road
Suite 153
Phoenix, AZ 85004
thogan@aclpi.org

Jeff Schlegel
SWEEP Arizona Representative
1167 W. Samalayuca Dr.
Tucson, AZ 85704-3224
schlegelj@aol.com

Jay I. Moyes
MOYES, SELLERS, & SIMS
1850 North Central Avenue, Suite 1100
Phoenix, AZ 85004
jimoyes@lawms.com

Jeffrey J. Woner
K.R. Saline & Assoc., PLC
160 N. Pasadena, Suite 101
Mesa, AZ 85201
jjw@krsaline.com

Scott Canty
General Counsel the Hopi Tribe
P.O. Box 123
Kykotsmovi, AZ 86039
Scanty0856@aol.com

Cynthia Zwick
1940 E. Luke Ave
Phoenix, AZ 85016
czwick@azcaa.org

Nicholas J. Enoch
349 North 4th Ave
Phoenix, AZ 85003
nick@lubinandenoch.com

Karen S. White, Esq
Air Force Utility Litigation & Negotiation
Team
AFLOA/JACL-ULT
139 Barnes Drive
Tyndall AFB, FL 32403
karen.white@tyndall.af.mil

Douglas V. Fant
Law Offices of Douglas V. Fant
3655 W. Anthem Dr.
Suite A-109 PMB 411
Anthem, AZ 85086
dfantlaw@earthlink.net

Barbara Wyllie-Pecora
27458 N. 129th Drive
Peoria, AZ 85383
bwylliepecora@yahoo.com

Carlo Dal Monte
Catalyst Paper Corporation
65 Front Street, Suite 201
Nanaimo, BC V9R 5H9
Carlo.dalmonete@catalystpaper.com

Steve Morrison
SCA Tissue North America
14005 West Old Hwy 66
Bellemont, AZ 86015
steve.morrison@sca.com